

first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second, different selected demodulation type on another portion of the unknown block further comprises:

means for identifying known interferer signal symbols in the unknown block;

5 and

means for updating estimates of interferer signal characteristics for use in interferer cancellation demodulation of at least a portion of the unknown block based on the identified known interferer signal symbols.

10 38. The system of Claim 37 wherein the interferer signal characteristic discontinuity comprises an interferer signal slot misalignment relative to a slot alignment of a desired signal component of the received signal.

39. The system of Claim 36 further comprising:

15 means for identifying a second known block of the sequence of symbols containing known symbol values, the another portion of the unknown block being between the interferer signal characteristic discontinuity and the second known block;

means for determining a desired demodulation type for use in demodulating the another portion of the unknown block based on the known symbol values
20 contained in the second known block by estimating interferer signal characteristics for the second known block and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics for the second known block;

wherein the means for demodulating the unknown block using a first selected
25 demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on another portion of the unknown block comprises:

means for selecting the desired demodulation type for use in
demodulating the unknown block as the first selected demodulation type and
30 the desired demodulation type for use in demodulating the another portion of the unknown block as the second selected demodulation type; and

means for bi-directional demodulating the unknown block if either the first selected demodulation type or the second selected demodulation type is interferer cancellation demodulation.

5 40. The system of Claim 39 wherein the means for demodulating the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on another portion of the unknown block further comprises means for selecting either uni-directional demodulation or bi-directional demodulation for the unknown
10 block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation.

 41. The system of Claim 40 wherein the means for selecting either uni-
15 directional demodulation or bi-directional demodulation for the unknown block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation comprises:

 means for selecting uni-directional demodulation if a difference between the
20 signal characteristics of the known blocks satisfies a difference criterion; and

 means for selecting bi-directional demodulation if the difference does not satisfy the difference criterion.

 42. The system of Claim 41 wherein the means for identifying a known
25 block of the sequence of symbols containing known symbol values and identifying a second known block further comprises:

 means for first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

 means for recoding and modulating the error corrected decoded bits to provide
30 a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions; and

means for identifying ones of the reencoded and modulated error corrected decoded bits as the first and second known block of the sequence of symbols containing known symbol values.

5 43. A system for processing a received signal comprising:

means for receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

means for first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

10 means for recoding and modulating the error corrected decode bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

 means for partitioning the sequence of symbols into a plurality of subfields,
15 ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values;

 means for determining the desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of
20 the subfields; and

means for demodulating the subfields using the respective determined desired demodulation types.

 44. The system of Claim 43 wherein the means for determining the desired
25 demodulation type for use in demodulating the subfields further comprises means for selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the subfields.

 45. The system of Claim 44 wherein the means for determining a desired
30 demodulation type for use in demodulating the subfields further comprises means for estimating interferer signal characteristics for the ones of the subfields and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics.